

CLAIMS

1. Gram negative rod bacterium strain deposited under the No. 12171 in the Collection DSMZ.

2. Endofucanase obtainable starting from the bacterium strain according to Claim 1.

3. Endofucanases characterized by the fact that they contain sequences analogous to the peptides ID No. 2, ID No. 3, ID No. 4 and/or ID No. 6.

4. Endofucanase genes characterized by the fact that they contain sequences analogous with the nucleotidic sequence ID No. 5.

5. Process for the preparation of sulphated fuco-oligosaccharides whose polymerisation degree is from 4 to 100, preferably from 4 to 20  $\alpha$ -L fucose units, more particularly of fuco-oligosaccharides corresponding to formulae (I) and (II) represented on Fig. 1, characterized by the fact that it comprises an enzymatic hydrolysis step using at least one enzofucanase according to one of claims 2 and 3.

6. Phytopharmaceutical composition for the plant protection comprising an efficient amount of sulphated fuco-oligosaccharides whose polymerisation degree is from 4 to 100, preferably from 4 to 20  $\alpha$ -L fucose units, more particularly of fuco-oligosaccharides corresponding to formulae (I) and (II) represented on Fig. 1 or obtained by way of the process according to claim 5.

7. Use for a treatment of protection of plants of sulphated fuco-oligosaccharides whose polymerisation degree is from 4 to 100, preferably from 4 to 20  $\alpha$ -L fucose units, more particularly of fuco-oligosaccharides corresponding to formulae (I) and (II) represented on Fig. 1 or obtained by way of the process according to claim 5.

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